

### AMENDMENTS TO THE CLAIMS

1. (Currently Amended) Method for preventing signal coupling between two or more flow-through type chip-based mounted piezoelectric resonator sensors used in an electrically conductive liquid, wherein each of the sensors has a flowcell body provided with its own resonator connected to its own single oscillator circuit and its own single power supply, said resonator being on a single substrate, comprising:

making said flowcell body out of a non-conducting material;

providing each sensor with its own, individual conducting shield which substantially surrounds said flowcell body, said conducting shield being connected to one pole of the power supply; and

making an inner wall of a flow tube and each cavity out of a non-conducting material.

2. (Canceled)

3. (Canceled)

4. (Canceled)

5. (Currently Amended) Piezoelectric resonator sensor comprising:

a flowcell body comprising a resonator connected to a single oscillator circuit, wherein  
said flowcell body is made of a non-conducting material; and

a single power supply, wherein said body is substantially surrounded by a conducting shield connected to one pole of the power supply, and wherein an inner wall of a cavity, an inlet channel and an outlet channel are insulated from said shield.

6. (Canceled)

7. (Canceled)

8. (Canceled)

9. (New) Method in accordance with claim 1, wherein said conducting shield is made of metal tape.

10. (New) Method in accordance with claim 1, wherein an individual sensor housing for each sensor is made of plastic, and the plastic is coated with said individual conducting shield.

11. (New) Method in accordance with claim 1, wherein said individual conducting shield is made by spraying, with a conducting material, an outer surface of an individual housing for said each sensor.

12. (New) Method in accordance with claim 1, wherein an oscillator circuit cavity for said each sensor is shielded by applying shielding material to interior walls of said cavity.

13. (New) Method in accordance with claim 1, wherein  
said conducting shields of different sensors are not interconnected, and  
each flow tube interconnecting adjacent sensors is not shielded.

14. (New) Sensor in accordance with claim 5, wherein said conducting shield is made of  
metal tape.

15. (New) Sensor in accordance with claim 5, wherein a sensor housing for said sensor is  
made of plastic, and the plastic is coated with said conducting shield.

16. (New) Sensor in accordance with claim 5, wherein said conducting shield is made by  
spraying, with a conducting material, an outer surface of a housing for said sensor.

17. (New) Sensor in accordance with claim 5, wherein an oscillator circuit cavity for said  
sensor is shielded by applying shielding material to interior walls of said cavity.

18. (New) Sensor in accordance with claim 5, wherein a flow tube of said sensor is not  
shielded.

19. (New) Method for preventing signal coupling between two or more flow-through type  
chip-based mounted piezoelectric resonator sensors used in an electrically conductive liquid,  
wherein each of the sensors has a flowcell body provided with its own resonator connected to its

own single oscillator circuit and its own single power supply, said resonator being on a single substrate, comprising:

providing each sensor with its own, individual conducting shield which substantially surrounds said flowcell body, said conducting shield being connected to one pole of the power supply; and

making an inner wall of a flow tube and each cavity out of a non-conducting material, wherein the poles connected to said individual conducting shields of said sensors have the same polarity in said single power supplies.

20. (New) Method in accordance with claim 19, wherein

said conducting shields of different sensors are not interconnected, and each flow tube interconnecting adjacent sensors is not shielded.

21. (New) Method for preventing signal coupling between two or more flow-through type chip-based mounted piezoelectric resonator sensors used in an electrically conductive liquid, wherein each of the sensors has a flowcell body provided with its own resonator connected to its own single oscillator circuit and its own single power supply, said resonator being on a single substrate, comprising:

applying individual conducting shielding material to interior walls of an oscillator circuit cavity for each sensor; and

making an inner wall of a flow tube associated with each sensor out of a non-conducting material.

22. (New) Method in accordance with claim 21, further comprising:

providing each sensor with its own, individual conducting shield which substantially surrounds said flowcell body, said conducting shields of different sensors not being interconnected; and

interconnecting adjacent sensors using a flow tube, wherein said flow tube is not shielded.

23. (New) Piezoelectric resonator sensor comprising:

a body comprising a resonator connected to a single oscillator circuit, wherein an oscillator circuit cavity is shielded by a first conductive shield applied to interior walls of said cavity; and

a single power supply, wherein said body is substantially surrounded by a second conducting shield connected to one pole of the power supply.

24. (New) Sensor in accordance with claim 23, further comprising a flow tube which is not shielded.

25. (New) Method for preventing signal coupling between two or more flow-through type chip-based mounted piezoelectric resonator sensors used in an electrically conductive liquid, wherein each of the sensors has a flowcell body provided with its own resonator

connected to its own single oscillator circuit and its own single power supply, said resonator being on a single substrate, comprising:

providing each sensor with its own, individual conducting shield which substantially surrounds said flowcell body, said conducting shield being connected to one pole of the power supply; and

making an inner wall of a flow tube and each cavity out of a non-conducting material, wherein

said conducting shields of different sensors are not interconnected, and  
each flow tube interconnecting adjacent sensors is not shielded.